

December 5, 2008

The Honorable Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Re: WT Docket No. 07-293
IB Docket No. 95-91
Gen. Docket No. 90-357
Rm No. - 8610

Dear Chairman Martin,

This correspondence is intended to outline a major Bombardier Learjet Inc. concern regarding planned Wireless Communications Service (WCS) changes that will jeopardize the Safety of flight test operations that rely on telemetry to maintain adequate Safety margins.

Bombardier Aerospace is a world leader in the design and manufacture of innovative aviation products that service both the transport and business jet aircraft markets. The development and certification flight testing for all Bombardier Aerospace aircraft is conducted at the Learjet Flight Test Center in Wichita, Kansas.

One of the issues to which the Federal Communications Commission has invited comment is the protection of adjacent band services against "the risk of interference" from licensees of the WCS spectrum¹. The WCS spectrum at 2345-2360 MHz is immediately adjacent to the flight test telemetry spectrum at 2360-2390 MHz. In an effort to develop their spectrum for mobile and portable applications, WCS licensees are seeking changes in the Commission Rules. The WCS spectrum has remained inactive for over ten years, so this represents a major shift in the potential use of the band and one which could lead to significantly more intense use of the band.

¹ Notice of Proposed Rulemaking at paragraphs 3 and 7.

Bombardier Learjet Inc. is very concerned with preserving the integrity of the spectrum used by aviation companies for flight test telemetry. Flight test is not a simple business, nor is it forgiving. During each test flight, engineers located on the ground review “real time” telemetric parameters related to the operation of the aircraft and essential to determining the operating limit boundaries. The telemetry also enables them to detect dangerous aircraft flight or systems conditions when there is still time to take corrective action. This significantly enhances flight Safety and flight test efficiency allowing the flight crew to focus on test execution and safe airspace and aircraft management.

This approach allows a rapid, yet safe, and incremental development of the eventual operational limits to the absolute maximums possible. Through the use of telemetry, we are able to safely clear multiple test points in a single flight, and thus expedite the FAA certification process. Interference-free telemetry is not only essential for flight safety; it materially contributes to accomplishing our test programs in the most efficient manner possible, helping control costs and enhancing our Company’s global competitiveness.

We understand the WCS proposal to make more efficient use of their spectrum. However, without adequate protections, these new operations threaten significant interference to our flight test programs. In particular, without a change in the Commission’s Rules, interference from WCS operations would entail a major reduction in the airspace we are able to use for flight testing. The addition of this spectrum interference constraint is clearly unacceptable to Bombardier Learjet Inc., especially when combined with other existing constraints such as increasing levels of air traffic congestion and the growing need for more complex systems integration testing that is totally dependent on the optimum use of telemetry.

Bombardier Learjet Inc. supports the comments filed in this proceeding¹ by its Association, the Aerospace and Flight Test Radio Coordinating Council (“AFTRCC”). AFTRCC engineering studies demonstrate the effects of allowing WCS companies to launch their new service using the current out-of-band emission (“OOBE”) limit. Our experts also tell us that we can not filter out these adjacent band emissions since we would, in effect, also be filtering out our own signal. Accordingly, relief must come from the WCS side in the form of tighter OOBE standards and the related rules as proposed by AFTRCC.

We hope you will take our concerns into account as you finalize your decision and ensure that, in a desire to assist the launch of WCS spectrum after years of inactivity, nothing is done that increases interference risks and thus jeopardizes the Safety of our flight test operations.

Sincerely,

A handwritten signature in blue ink, appearing to read "David Coleal".

Mr. David Coleal
Vice President and General Manager,
Bombardier Learjet Inc.

cc: The Honorable Michael J. Copps
The Honorable Jonathan S. Adelstein
The Honorable Deborah Taylor Tate
The Honorable Robert M. McDowell

Charles Mathias
Angela Giancarlo
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